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THE Feed SITUATION

BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

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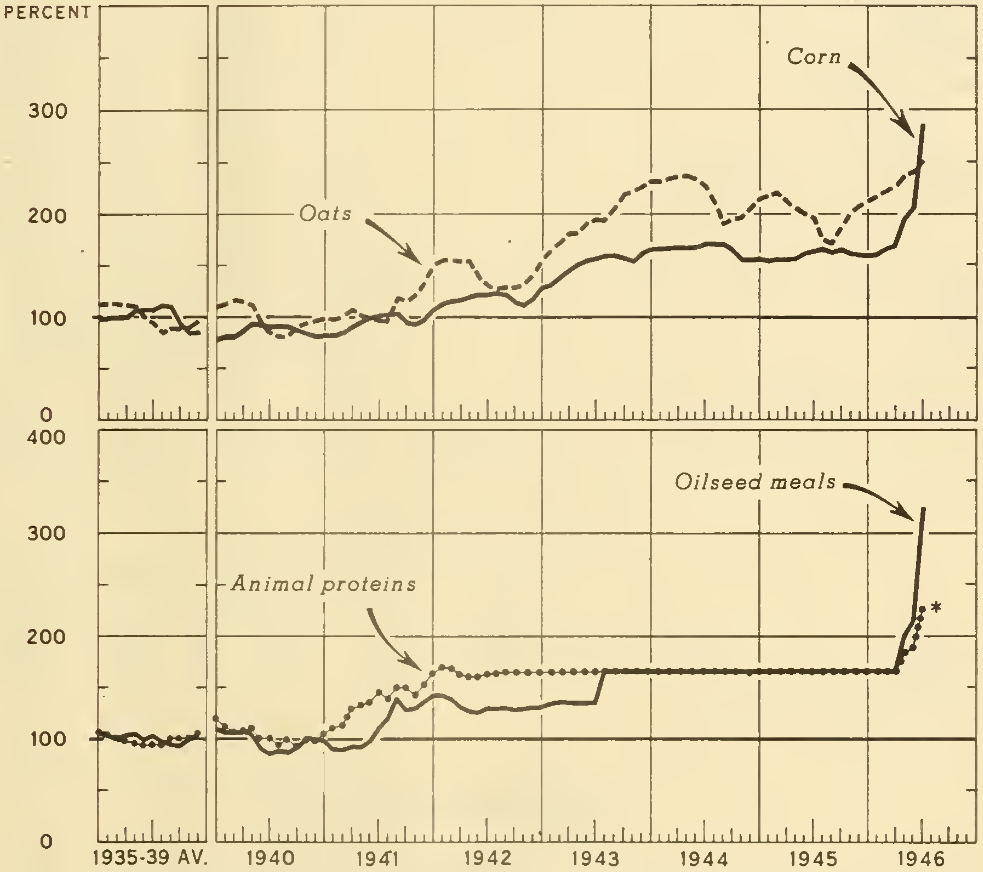
In this issue:

FACTORS ASSOCIATED WITH FARM SALES OF CORN

PRICES RECEIVED BY FARMERS FOR CORN AND OATS, AND MARKET PRICES OF HIGH-PROTEIN FEEDS, BY MONTHS, 1935-46
INDEX NUMBERS (1935-39=100)



* INCLUDES FISH MEAL, ON WHICH CEILING PRICES WERE RE-ESTABLISHED IN JULY
TANKAGE AND MEAT SCRAP PRICES ADVANCED MORE THAN 30 PERCENT IN JULY

U. S. DEPARTMENT OF AGRICULTURE NEG. 46095 BUREAU OF AGRICULTURAL ECONOMICS

Prices of corn and high-protein feeds advanced relatively more than prices of most other feeds in July. By early August prices of many grains and grain-byproduct feeds had declined to levels about halfway between the July peaks and the June 30 ceilings. Oats prices were below the former ceilings.

Ceiling prices have been ordered reestablished on most byproduct feeds and mixed feeds, but feed grains are exempt from price control at this time.

Table 1.- Statistical Summary

PRICES

Item	Unit	1944		1945		1946	
		June	July	June	July	June	July
		Cents	Cents	Cents	Cents	Cents	Cents
Grains and Hay							
Corn, No. 3 Yellow, Chicago	Bushel	115.5	115.5	117.9	117.9	152.8	216.7
Price received by farmers, U. S.	"	115.0	117.0	111.0	112.0	142.0	196.0
Oats, No. 3 White, Chicago	"	80.5	77.1	70.0	68.2	84.0	82.2
No. 3 White, Minneapolis	"	79.4	73.1	69.0	65.6	83.6	81.4
Price received by farmers, U. S.	"	78.8	76.4	67.4	65.9	80.9	84.7
Barley, No. 3, Minneapolis	"	134.9	131.3	118.3	117.3	143.2	161.1
Price received by farmers, U. S.	"	112.0	110.0	97.6	98.9	125.0	140.0
Grain sorghums, price received by farmers, U. S.	100 pounds	219.0	215.0	193.0	204.0	257.0	304.0
Wheat, No. 2 Hard Winter, Kansas City	Bushel	155.6	152.1	168.2	158.3	186.1	197.8
Rye, No. 2, Minneapolis	"	112.1	113.0	155.3	152.8	285.0	209.0
		Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Hay, No. 1 Alfalfa, Kansas City	Ton	21.00	22.00	24.15	23.80	31.25	29.90
Price received by farmers, U. S.	"	15.00	13.90	15.90	15.40	14.70	15.00
Byproduct Feeds (bagged)							
Standard bran, Minneapolis	Ton	37.75	37.75	37.75	37.75	47.75	65.90
Chicago	"	39.80	39.80	39.80	39.80	49.80	71.15
Buffalo	"	41.55	41.55	41.55	41.55	52.05	70.95
Standard middlings, Minneapolis	"	37.75	37.75	37.75	37.75	47.75	67.25
Chicago	"	39.80	39.80	39.80	39.80	49.80	71.15
Buffalo	"	41.55	41.55	41.55	41.55	52.05	70.95
Cottonseed meal, 41 pct. protein, Memphis	"	48.50	48.50	48.50	48.50	62.75	100.00
Linseed meal, 32 pct. protein, Minneapolis	"	1/45.50	1/45.50	45.50	45.50	59.25	89.50
30 pct. protein, San Francisco	"	47.00	47.00	47.00	47.00	61.25	73.75
Soybean meal, 41 pct. protein, Chicago	"	51.90	51.90	52.00	52.00	66.00	97.00
Peanut meal, 45 pct. protein, S.E. milling points	"	53.00	53.00	53.00	53.00	67.25	98.40
White hominy feed, Chicago	"	49.70	49.40	48.60	49.00	59.00	84.35
Gluten feed, 23 pct. protein, Chicago	"	41.50	41.50	41.25	41.25	55.25	65.75
Tankage, digester, 60 pct. protein, Chicago	"	2/74.55	2/74.55	2/74.55	2/74.55	84.30	112.45
Meat scraps, Chicago	"	2/73.50	2/73.50	2/73.50	2/73.50	83.25	110.85
Fish meal, San Francisco	"	79.50	79.50	79.50	79.50	89.50	89.50
Alfalfa meal, No. 1 fine, Kansas City	"	44.80	44.80	39.20	42.50	44.70	47.70
Mixed dairy feed, 16 pct. protein, price paid by farmers, U. S.	100 pounds	3.02	3.01	2.86	2.88	3.50	3.81
Laying mash, price paid by farmers, U. S.	"	3.65	3.66	3.55	3.58	4.26	4.59

INDEX NUMBERS OF PRICES

		Percent	Percent	Percent	Percent	Percent	Percent
Feed grains, U. S.	1910-14 = 100	183	184	171	172	216	280
Ten principal high-protein feeds, terminal markets	1935-39 = 100	166	166	166	166	208	296
Four oilseed meals	"	166	166	166	166	212	322
Tankage, meat scraps, and fish meal	"	166	166	166	166	187	226
Gluten feed, brewers' dried grains, and distillers' dried grains	"	168	168	167	167	218	261

LIVESTOCK-FEED PRICE RATIOS 3/

Hog-corn, Chicago	Bushel	11.0	11.5	12.5	12.3	9.7	8.3
Hog-corn, U. S. farm prices	"	11.0	10.9	12.7	12.5	10.1	8.6
Beef steer-corn, Chicago	"	13.9	13.9	14.1	14.1	11.3	9.9
Butterfat-feed, U. S. 4/	Pound	23.0	23.2	26.2	27.5	23.7	21.7
Milk-feed, U. S. 4/	"	1.26	1.28	1.26	1.35	1.21	1.06
Egg-feed, U. S.	"	9.4	10.4	12.4	13.1	9.6	9.4

Prices compiled from Chicago Journal of Commerce, Minneapolis Daily Market Record, Kansas City Grain Market Review, and reports of the Grain Branch, Production and Marketing Administration, and the Bureau of Agricultural Economics.

1/ 34 percent protein. 2/ Processors' price at Chicago plus allowance for bags. 3/ Units of corn or other concentrate ration equal in value to 100 pounds of hog or beef-steer, pounds of butterfat or milk, or dozen eggs.
4/ Includes dairy production payments only through June 30, 1946.

THE FEED SITUATION

Approved by the Outlook and Situation Board, August 23, 1946

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SUMMARY

Feed crop prospects improved steadily during the early summer, and by August it appeared that the feed-grain supply per animal unit in 1946-47 would be the most liberal in history. Also, the crop of new hay and record carry-over stocks together will provide liberal supplies of hay per animal unit during the coming year. Total supplies of byproduct feeds for the 1946-47 feeding season probably will be larger than in 1945-46, although supplies of high-protein feed probably will be slightly smaller.

This year's total production of corn, oats, barley, and grain sorghums, on the basis of reports to mid-August, will be at the record level of 129 million tons. This total is 6 million more than the previous record production in 1942, and 10 million more than last year's production. With liberal quantities of feed grain available, wheat feeding during the coming year may be cut to half the level of the past year.

The 1946 corn crop was estimated on August 15 at over 3.4 billion bushels, 239 million larger than the previous record crop of 1944, and 424 million larger than the 1945 crop. The feeding quality of this year's corn is expected to be better than last year, also. The 1946 oats crop was estimated on August 1 at 1.5 billion bushels, only 49 million less than the record 1945 crop. Barley production was indicated to be 5 percent under that of 1945, and 13 percent under the average

for the preceding 10 years. Sorghum-grain production, estimated on August 1 at 81 million bushels, would be 15 million less than in 1945, and the smallest production since 1939.

Livestock-feed price relationships became very unfavorable to livestock production during early July, as feed prices increased considerably more than prices of livestock or livestock products. Some improvement in these relationships occurred in late July and early August. Feed prices generally had turned downward, at least moderately, from the peaks reached in July. At the same time, livestock prices continued to advance. Corn and barley prices and prices of grain mill-byproduct feeds declined to levels about halfway between the June 30 ceilings and the July peaks. Oats prices were below the former ceilings. Corn, oats, and barley futures prices for winter delivery were about 15 cents per bushel under the June 30 ceilings. Prices of most high-protein feeds, however, continued at or near peak levels reached since lapse of price controls.

On August 20 the Price Decontrol Board ordered prices recontrolled on most byproduct feeds and mixed feeds, but exempted from price control at this time all feed grains and dairy products. The OPA specified recontrol dates as follows: mixed feeds, August 26; and byproduct feeds, September 3.

Limitations on the domestic use of grains will be eased September 1, which, in effect, will permit increased output of some byproduct feeds, particularly wheat millfeeds. Corn processors, feed mixers, brewers, and distillers will be permitted greater use of grain, and provisions governing the extraction rate in flour milling will be removed.

Analysis of the principal factors associated with the quantity of corn sold by farmers during the past 20 years suggests that, if the corn crop turns out as good as or better than indicated in August, a record or near-record quantity of corn may be marketed in the North Central Region in 1946-47. Usually farmers in that region sell about 85 percent of the total corn marketed by farmers in the United States.

BACKGROUND. - Stocks of old-crop corn on farms and at terminal markets on July 1 totaled only 531 million bushels, the smallest July 1 stocks since 1937 and nearly 30 percent less than on July 1 a year ago. Carry-over of old-crop oats on farms and at terminal markets on July 1 totaled 281 million bushels, an increase of 62 million bushels from a year earlier. This is the largest oats carry-over in the 20-year period for which July 1 data are available. Carry-over of old crop barley on farms and at terminal markets on June 1 was estimated at 51.5 million bushels, 26 million less than a year earlier, and the smallest carry-over since 1938.

Total production of grain mill-byproduct feeds, oilseed cake and meal, and animal and marine byproduct feeds was about 9 percent smaller from October 1945 through June 1946 than during the corresponding 9-month period of 1944-45. Most of the reduction was in wheat millfeeds, distillers' dried grains, cottonseed and peanut cakes and meals, corn gluten feed, and fish meal.

Record Feed-Grain Production Indicated

Total 1946 production of the four principal feed grains---corn, oats, barley, and grain sorghums - based on the August crop reports, will be at the record level of 129 million tons, about 6 million tons more than the previous record production in 1942, and 10 million tons more than the production a year ago. The favorable crop prospects in August give promise of the most liberal feed-grain supply per animal unit in history, despite relatively small carry-overs. Likewise, the crop of new hay, added to record carry-over stocks, will provide liberal supplies of hay per animal unit during the coming year.

The 1946 corn crop was estimated on August 15 to be by far the largest on record. Production of all corn, including corn for grain, silage, and for hogging down, grazing, and forage, was forecast at 3,442 million bushels. A crop this size would exceed the previous record crop of 1944 by 239 million bushels, and would exceed last year's crop by about 424 million bushels. Even with the relatively small carry-over in prospect, the total supply of corn for 1946-47 would be about equal to the record supply for 1942-43.

The estimated 1946 production of oats is 1,499 million bushels, only 49 million bushels less than the record 1945 crop of 1,548 million bushels, and more than a third larger than the 1935-44 average. With the record large carry-over of old-crop oats on July 1, the total supply of oats for 1946-47 is slightly larger than the abundant supplies a year ago, promising plentiful oats supplies for the coming year.

Production of barley in 1946 was indicated on August 1 at 251 million bushels, an increase of more than 20 million bushels over the July 1 estimate, but 5 percent less than was produced in 1945 and 13 percent below the 1935-44 average of 290 million bushels.

Sorghum-grain production is estimated on the basis of August 1 conditions at about 81 million bushels, 15 million less than a year ago and the smallest production of sorghums for grain since 1939. The reported 5.8 million acres of all sorghums to be harvested for grain is 8 percent less than the acreage harvested last year. The average yield this year also is expected to be low.

Table 2.- Feed-grain production, by regions, 1945-46

Geographic division	Corn	Oats	Barley	Sorghum grains	Total
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 tons
			1945		
North Atlantic	98,246	51,133	5,702	---	3,706
East North Central ...	976,013	487,731	9,794	29	35,368
West North Central ...	1,307,980	810,476	121,553	18,379	53,023
South Atlantic	209,093	47,245	5,461	50	6,743
South Central	397,065	99,839	9,434	68,548	14,861
Western	30,013	51,239	112,017	8,593	4,589
Total	3,018,410	1,547,663	263,961	95,599	118,290
			1946 1/		
North Atlantic	102,437	66,132	6,782	---	4,089
East North Central ...	1,118,456	488,956	10,864	30	39,402
West North Central ...	1,602,333	749,559	109,554	14,776	59,901
South Atlantic	193,253	49,455	6,202	30	6,352
South Central	398,907	93,858	8,414	57,510	14,484
Western	26,816	50,918	109,004	8,481	4,419
Total	3,442,202	1,498,878	250,820	80,827	128,647

1/ August indications.

Table 3.- Feed grains: Total supplies and supply per animal unit, United States, 1939-46

Year	Corn Oct. 1	Oats July 1	Barley June 1	Grain sorghums production	Total supply	Grain-consuming animal units 1/	Supply per animal unit
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Thousands	Ton
Average 1939-43	93,301	22,003	9,953	2,569	127,826	149,153	.86
1944	95,702	21,544	8,317	5,083	130,646	146,187	.89
1945	93,135	28,267	8,206	2,677	132,285	146,535	.90
1946 2/	101,282	28,480	7,256	2,263	139,281		

1/ January 1 following.

2/ Preliminary: basis August conditions.

Table 4.- Hay supplies, by regions, 1939-46 1/

Geographic division	Average 1939-43	1943	1944	1945	1946 2/
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
North Atlantic	13,458	15,236	13,642	14,844	14,672
East North Central ..	23,622	23,396	21,472	23,618	22,545
West North Central ..	30,693	32,363	32,553	33,923	31,096
South Atlantic	6,312	6,701	6,016	7,021	7,568
South Central	13,085	12,979	12,090	14,499	14,528
Western	21,885	22,306	22,457	23,172	22,062
Total United States	109,055	112,981	108,230	117,077	112,471

1/ Production plus farm stocks May 1.

2/ Production indicated August 1 plus farm stocks May 1.

The total 1946-47 supply of corn, oats, barley, and sorghum grains (including carry-over stocks of corn, oats, and barley on farms and at terminal markets, plus 1946 production of the four grains) is now forecast at 139 million tons. This would be 20 percent larger than the prewar average supply (1937-41) and only 2 percent smaller than the record supply of 1942. With reduced numbers of livestock, the 1946-47 domestic supply of the four feed grains apparently will be about 11 percent larger per animal unit than in 1945-46, and 15 percent larger than the average for the preceding five years. The quantity of wheat and rye to be fed in the 1946-47 feeding season is now expected to total only half that fed in 1945-46. If the estimated quantities of imported oats and barley and of wheat and rye to be fed are added to the domestic supply of the four feed grains, thetotal quantity of these grains for 1946-47 is 1 to 2 percent larger than the corresponding supply in either of the 2 previous years. On an animal-unit basis, the supply would be the largest on record. The greatest factor in the feed grain supply is corn, and new-crop corn does not usually become available in volume until about October. Until corn from the new crop is available in volume, and perhaps for sometime after, local shortages of feed may occur, owing chiefly to transportation difficulties.

Grain Use Restrictions Eased

Partial removal of limitations on the domestic use of grains was announced by the Secretary of Agriculture in late August. Effective September 1, the quantity of corn and grain sorghums permitted to be used monthly by processors and feed mixers is increased by 5 percent of the base period use. Brewers and distillers also will be permitted increases in the quantity of grains used. The provision requiring 80 percent extraction of wheat flour, instead of the normal rate of about 72 percent, is terminated as of September 1. In view of the increased output of wheat millfeeds which is possible without restrictions on flour milling extraction rates, feed manufacturers will not be permitted, after October 1, to use any wheat of milling quality in mixed feeds except in the Western States, where the quantity of milling wheat which can be fed will be limited to 40 percent of the total grains used.

Byproduct Feed Prospects

The total supply of byproduct feeds available for livestock during the year beginning next October 1 probably will be larger than in 1945-46, both in total tonnage and on a per animal-unit basis. On the basis of August indications, the quantity of principal byproduct feeds available for feed in 1946-47 will total around 18 million tons compared with about 17.4 million in 1945-46. Output of wheat millfeeds is likely to be considerably larger than in 1945-46, because of the large domestic supply of wheat, the strong domestic and foreign demand for wheat flour, and the removal of requirements for a higher-than-normal extraction rate in milling.

Total supplies of oilseed cake and meal may be almost as large in 1946-47 as in 1945-46. Changes expected by items are: soybean cake and meal, slightly less; linseed, sharply less; peanut, about the same; cottonseed, slightly larger; and copra, much larger.

Output of gluten feed and meal in 1946-47 is expected to be considerably above that of 1945-46; and that of brewers' and distillers' dried grains, somewhat larger. Supplies of beet pulp probably will be considerably larger than in 1945-46, and output of alfalfa meal is expected to be at or near a record level. Output of tankage and meat scraps may be down somewhat from 1945-46 levels.

Table 5.- Production and stocks of specified byproduct feeds, October-June, 1944-46

Item	October-June		1945		1946	
	1944-45	1945-46	May	June	May	June
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Production						
Cottonseed cake and meal	1,697.8	1,252.0	104.5	61.9	44.3	23.3
Soybean cake and meal	2,783.0	3,009.0	363.6	318.7	336.2	289.5
Linseed cake and meal	347.8	408.2	27.5	24.2	35.1	42.5
Peanut cake and meal	77.7	69.7	11.1	8.6	7.2	6.2
Copra cake and meal	33.4	1/ 37.0	4.1	2.9	5.9	7.3
Corn gluten feed and meal	694.1	569.0	79.3	69.0	67.6	73.9
Brewers' dried grains	154.6	158.4	18.6	20.3	16.5	17.2
Distillers' dried grains	485.7	271.8	65.6	57.4	19.7	17.9
Wheat millfeeds	4,424.4	3,665.7	522.5	505.6	252.5	259.0
Rice millfeeds	127.4	129.0	7.1	4.6	5.5	4.1
Alfalfa meal	573.8	796.8	78.0	102.3	114.5	161.5
Fish cake and meal	122.8	94.0	9.1	21.0	6.5	1/ 19.5
Stocks end of period						
Cottonseed cake and meal	71.5	40.3	98.6	71.5	45.7	40.3
Peanut cake and meal	4.3	2.0	6.7	4.3	2.0	2.0
Brewers' dried grains	3.2	2.7	2.5	3.2	2.7	2.7
Distillers' dried grains	3.2	2.3	4.3	3.2	2.5	2.3
Alfalfa meal	30.4	27.6	23.9	30.4	28.5	27.6

Compiled as follows: Cottonseed cake and meal and wheat millfeeds, Bureau of the Census; soybean and linseed cake and meal, Grain Branch, Production and Marketing Administration, derived from Census crushings reports; brewers' and distillers' dried grains, copra cake and meal, and rice millfeeds, Production and Marketing Administration; gluten feed and meal derived from reports of the Corn Industries Research Foundation; fish cake and meal from Fish and Wildlife Service, Dept. of Interior.

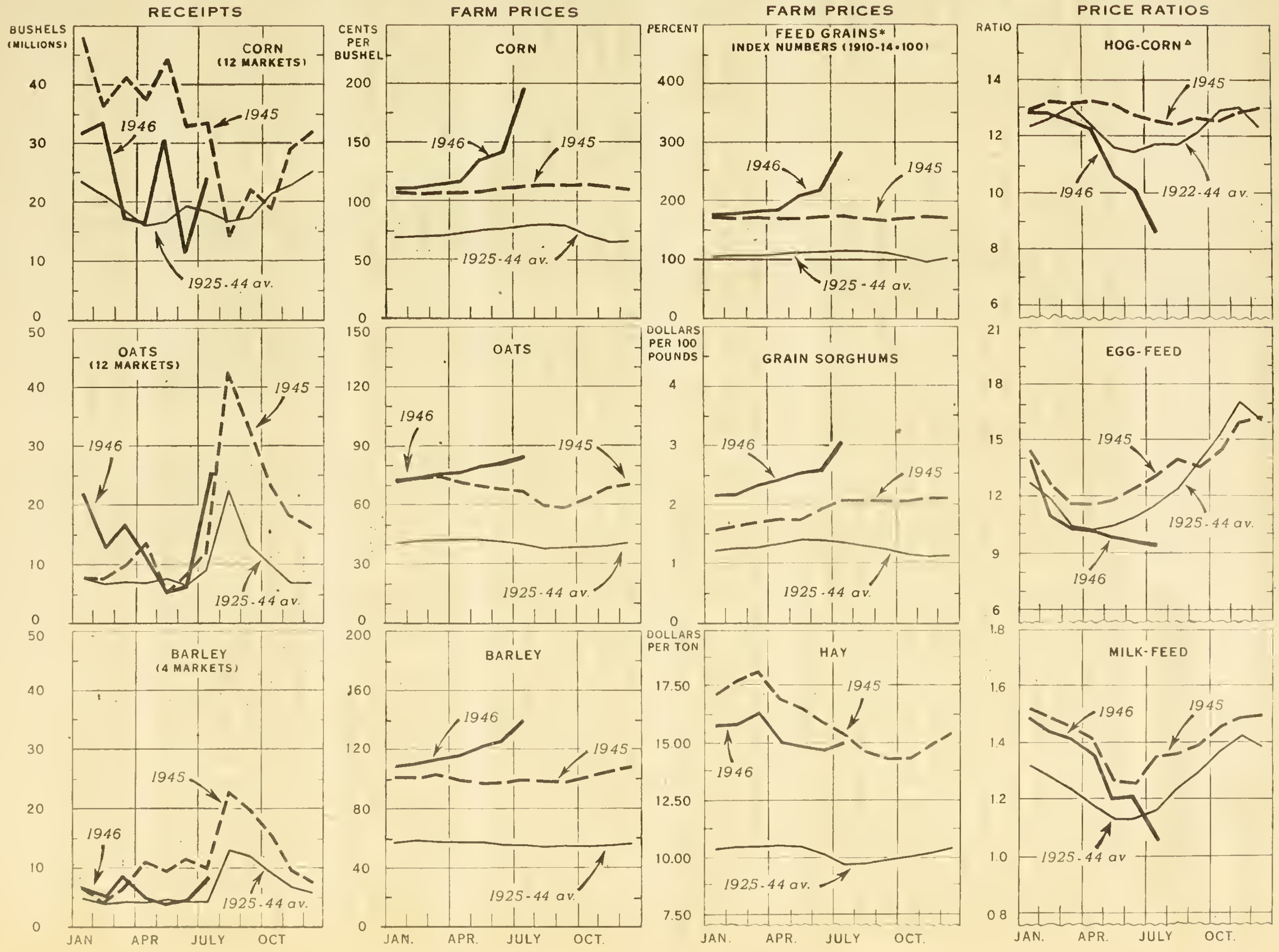
1/ Preliminary.

Livestock-Feed Price Relationships

Dairy product-feed price relationships became very unfavorable during July, as feed prices increased sharply and unit returns to dairy producers remained almost unchanged compared with June. Both the milk-feed and butterfat-feed price ratios were below average for the first time since 1940, and both were 21 percent below July 1945, (when dairy production payments were included). These unfavorable relationships, together with advancing values of dairy animals for meat, tend to accelerate the decline in milk cow numbers.

Feed prices also advanced more than prices of poultry products and, as a result, all poultry product-feed price ratios declined from mid-June to mid-July. The cost of poultry ration (U.S. average) rose from $3.49 per hundred pounds to $3.94, an increase of 13 percent. During the same period farm egg prices increased 11 percent, chicken 11 percent, and turkey 5 percent. The decrease in the egg-feed price ratio from mid-June to mid-July was, with the exception of 1936, the only year of record that a decline has occurred during that period. The egg-feed price ratio in mid-July was 28 percent below that of a year earlier, and 18 percent below the long-time average. Turkey-feed and chicken-feed price ratios also were below long-time averages.

MARKET RECEIPTS, PRICES OF SPECIFIED FEEDS, AND LIVESTOCK-FEED PRICE RATIOS



* CORN, OATS, AND BARLEY

Δ BASED ON PRICES RECEIVED BY FARMERS

The hog-corn price ratio became distinctly unfavorable to hog production by mid-July. With the United States average price of hogs, farm basis, on July 15 at $16.80 per hundred pounds, the hog-corn price ratio was 8.6 compared with the average for July 1925-44 of 11.7. In late July and early August hog prices advanced further while corn prices declined, improving the price ratio considerably.

Feed Prices Turn Downward After Sharp July Advance

The sharply higher prices of most feeds, after lapse of price controls on July 1, and the uncertainty over possible future price control resulted in a considerable easing in the demand for feed during late July and early August. At the higher prices, buyers apparently were interested only in sufficient feed for more immediate requirements, and most purchases were made only on a "hand-to-mouth" basis. By mid-August, feed prices generally had turned downward, at least moderately, from the peaks reached in July. Corn and barley prices had declined to levels about halfway between the former ceilings and the July peaks. Oats prices had dropped to levels below the former ceilings, reflecting the large supplies in the country. Among byproduct feeds, wheat millfeed prices had declined to levels about halfway between the former ceilings and the July peaks. But prices of most high-protein feeds, particularly oilseed cakes and meals and animal proteins, continued at or near peak levels.

Prospects for large supplies of feed grain were reflected in the price behavior in the commodity markets. By the third week of August, futures prices on corn, oats, and barley for winter delivery were down to levels about 15 cents per bushel below the June 30 ceilings.

Cash-grain farmers benefited from the sharp advance in feed prices after July 1. On July 15, the average prices received by farmers for corn reached $1.96 per bushel, 54 cents higher than in mid-June, and the highest corn price in the series of monthly records extending back to 1908. It was 7.7 cents per bushel above the previous high established in August 1919. Corn prices in mid-July were above those for wheat for the first time since 1940.

The July 15 farm price for barley, at $1.40 per bushel, was 15 cents higher than a month earlier. Most of the advance in barley prices was in feed barley. Market prices of those grades advanced to levels about equal to prices of malting grades. Under price control, ceilings for malting barley were 15 cents higher than for feed barley.

The farm price of oats at mid-July reached 84.7 cents per bushel, 3.8 cents higher than a month earlier. Prices of both oats and barley reached levels in mid-July slightly below a few months in mid-1920, but otherwise higher than for any month since 1908, the earliest year for which monthly data are available. Hay prices at $15.00 per ton were slightly higher than in June, whereas hay prices usually decline seasonally during July.

The index of prices received by farmers for feed grain rose 64 points from mid-June to mid-July, reaching 280 percent of its 1909-14 average, the highest on record.

In general, the greatest advances in byproduct feed prices during July were in the group of high-protein byproduct feeds. Oilseed meal prices advanced around 50 percent from the ceiling levels in effect in June. Prices of a number of kinds of lower-protein content byproduct feeds advanced 25 to 40 percent. Upon passage of legislation extending OPA, ceiling prices were reestablished for only a few kinds of feeds, including hay and hay products, fish meal, peanut meal, and beet pulp. The index of market prices of 10 principal high-protein feeds rose 88 points in July to 296 percent of the 1935-39 average, the highest level on record. The index of prices paid by farmers for feed in mid-July reached 245 percent of the 1910-14 level, 39 points higher than in mid-June, 70 points up from a year earlier, and 34 points above the previous peak recorded for 1919. Prices paid by farmers for dairy feed and for laying mash in mid-July were less than 10 percent above mid-June prices, reflecting a lag in price increases of mixed feed compared with the ingredient costs.

Table 6.- Mid-month prices received by farmers for feed grains and hay, United States, 1935-46

Mid-month price	Corn	Oats	Barley	Grain sorghums	All hay	Index numbers, feed grains	Index numbers, feed grains and hay
	Dollars per bu.	Dollars per bu.	Dollars per bu.	Dollars per 100 lb.	Dollars per ton	(1909-14 = 100)	(1909-14 = 100)
July 15							
Average							
1935-39	.764	.321	.472	1.22	8.18	108	98
1940	.631	.283	.363	1.12	7.10	90	82
1941	.696	.327	.452	.99	7.66	100	91
1942	.831	.439	.565	1.14	9.06	123	111
1943	1.08	.656	.92	2.13	11.90	166	151
1944	1.17	.764	1.10	2.15	13.90	184	168
1945	1.12	.659	.989	2.04	15.40	172	161
1946							
Jan.	1.10	.717	1.09	2.17	15.70	173	164
Feb.	1.11	.731	1.11	2.17	15.80	176	166
Mar.	1.14	.751	1.14	2.32	16.30	180	171
Apr.	1.16	.761	1.16	2.40	15.00	183	171
May	1.35	.795	1.22	2.54	14.80	207	188
June	1.42	.809	1.25	2.57	14.70	216	195
July	1.96	.847	1.40	3.04	15.00	280	244

No Ceilings on Feed Grains; Byproduct feeds and Mixed Feeds Recontrolled

On August 20 the Price Decontrol Board, established under the Emergency Price Control Extension Act of 1946, ordered all grains (except flaxseed) and dairy products exempted from price control. The Board, however, ordered ceiling prices reestablished on most byproduct feeds and mixed feeds. Prices of livestock, meat, cottonseed, flaxseed, and soybeans also were ordered recontrolled.

The Decontrol Board's decision leaves corn, oats, barley, and sorghum grains, as well as wheat and rye free from price control. But price ceilings are to be reestablished on practically all byproduct feeds, except dairy products [illegible] utilized for feed. Ceiling prices on hay, and a few kinds of byproduct feeds (beet pulp, alfalfa meal, fish meal, etc.) had already been reestablished after extension of the Price Control Act.

Recontrol of prices was ordered for practically all commercial mixed feed. Only straight grain mixes were exempted.

The OPA announced on August 21 the following dates on which prices would be recontrolled: mixed feeds, August 26; byproduct feeds, September 3; soybeans and flaxseed, September 3; livestock and meat, (producers) August 29. Special provisions were given for determining mixed feed ceilings to apply only until September 22. On that date ceiling prices on mixed feed will revert to the June 30 level plus any increase in prices of ingredients.

Feed Grain Marketings Increase

Movement of feed grain through principal terminal markets of the country increased sharply during July and early August, as movement off farms and country elevators was stimulated by sharply higher prices following lapse of price controls on July 1. Receipts of corn at 12 primary markets in July were more than twice as large as during June, whereas receipts usually are about the same during the two months. Oats receipts at the same 12 markets were more than four times as large during July as in June. The heavier movement of oats chiefly reflected large supplies of old-crop oats on farms and the harvesting of another very large crop. Barley receipts at four principal terminal markets during July were 77 percent larger than in June, despite the low level of stocks of old-crop barley remaining on farms and at country elevators, and the prospects of a small crop this year.

Receipts of corn at 12 primary markets from October 1, 1945 through June 30, amounted to 220 million bushels, only about two-thirds as much as receipts during the corresponding 9 months a year earlier, and the smallest receipts for that period since 1943-44. Movement of corn through terminal markets is expected to be seasonally large during the next two or three months, with prospects of a bumper crop. Marketings of corn from farms during the 1946-47 season are expecte to be large, probably at or near a record level, if final out-turn of the crop is as large as indicated on August 15.

Oats receipts at 12 primary markets during the year ended June 30, 1946 totaled 219 million bushels, the greatest quantity received at those markets in any season since 1924. With another very large oats crop being harvested, it is likely that the market movement of oats during 1946-47 will again be large.

Barley receipts at 4 primary markets during the season ending June 30, 1946, were about 18 percent smaller than a year earlier, reflecting the smaller 1945 crop. Even with a smaller supply of barley in 1946-47, the market movement of that grain may be about as large as in 1945-46, inasmuch as supplies of corn and oats will be abundant and barley producers may dispose of a larger proportion of their barley to the malting industry.

Table 7. - Feed grains: Receipts at primary markets, June-July, 1944-45, and May-July 1946

Item	1944		1945		1946		
	June	July	June	July	May	June	July
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
Corn, 12 markets 1/...	22,111	14,762	32,618	33,314	30,697	11,396	24,122
Oats, 12 markets 1/...	7,734	7,944	7,829	11,929	5,291	6,114	25,692
Barley, 4 markets 2/..	7,850	11,135	11,265	9,602	4,116	4,668	8,284

Compiled from reports of the Grain Branch, Production and Marketing Administration.
1/ Chicago, Milwaukee, Minneapolis, Duluth, St. Louis, Kansas City, Peoria, Omaha, Indianapolis, Milwaukee, Chicago, and Duluth.

2/ Minneapolis, Milwaukee, Chicago, and Duluth.

FACTORS ASSOCIATED WITH FARM SALES OF CORN

By Reed A. Phillips

Serious difficulties in purchasing desired quantities of corn have plagued livestock producers and corn processors during at least part of each of the past three or four years. Livestock producers were able to substitute other grains for corn to a considerable extent when corn was not obtainable, but corn processors had little or no opportunity for such substitution. Government assistance was required, at times, to secure corn for processors so that their operations could continue.

The following analysis points out some of the principal factors associated with the quantity of corn marketed, and the changes from year to year in the quantities marketed.

Only about one-fifth of the corn crop in the United States is marketed by farmers. The remaining four-fifths are used on farms where corn is produced. During the past twenty years, farmers have sold an average of less than 500 million bushels of corn each season. The greatest quantity of any crop ever marketed by farmers was the 730 million bushels sold in 1944-45. During the current season, it is estimated that over 600 million bushels of 1945 corn will be marketed by producers.

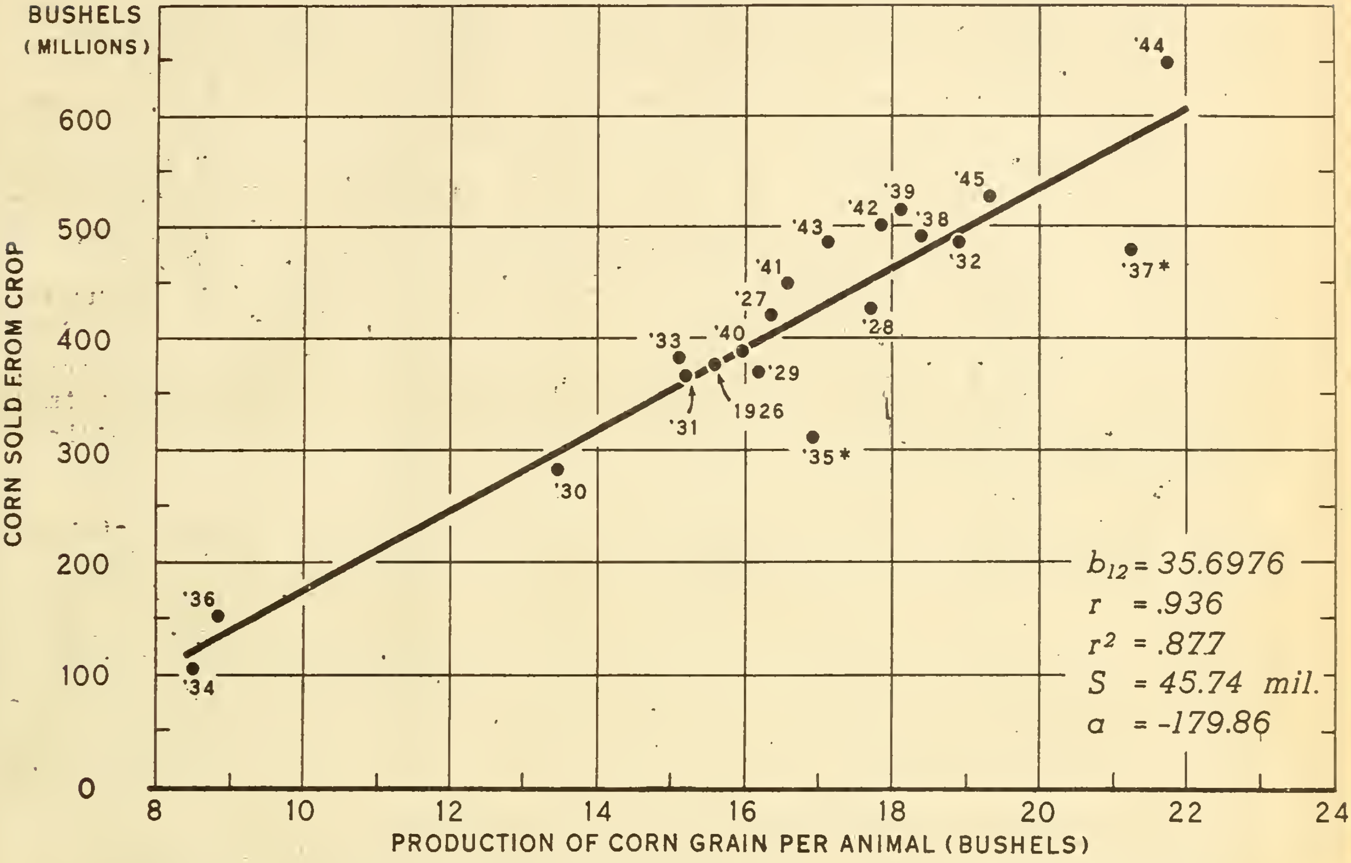
Of the total quantity of corn sold by producers, an undetermined quantity is "farm to farm" sales. However, a large part of the corn sold usually goes through commercial channels, much of it moving by rail. About half goes through the 12 principal terminal markets of the country.

Probably the greatest proportion of the commercial corn, or that quantity sold by producers which moves through commercial channels, is utilized by livestock producers either in the form of corn grain or in mixed feeds. The commercial mixed feed industry normally uses large quantities of commercial corn, Other principal users are the corn wet millers (in production of starch, sugar, sirup, dextrines, etc.), the corn dry millers (corn meal, hominy, grits, breakfast foods, etc.), and the distilling and brewing industries. In addition, part of the marketings are commercial seed and corn for export.

Farmers in the North Central region sell by far the greatest proportion of the total quantity of corn sold by producers each season (See Table 8). This region is the most important corn-producing area of the country. Almost 85 percent of the total quantity marketed by United States farmers comes from the North Central States. Some 40 to 45 percent of the U. S. total is sold by West North Central farmers, and a slightly smaller percentage by East North Central farmers. The greatest quantities of corn are marketed by farmers in Illinois, Iowa, and Nebraska.

Because of the importance of the North Central Region in the quantity of corn marketed each season, analysis of factors associated with the quantity marketed is best limited to that region. The analysis here does not take into

RELATION OF FARM SALES OF CORN TO PRODUCTION OF CORN GRAIN PER ANIMAL, NORTH CENTRAL REGION, 1926-45



*REFLECTS INFLUENCE OF SEVERE DROUGHT PRECEDING YEAR

DATA FOR 1945 ARE PRELIMINARY

U. S. DEPARTMENT OF AGRICULTURE

NEG. 46098 BUREAU OF AGRICULTURAL ECONOMICS

The scatter diagram shows the close relationship that existed during 1926-45 between the amount of corn grain produced in the North Central Region relative to the number of animals fed, and the quantity of corn marketed by farmers in that region. The quantity of corn on hand in excess of immediate or anticipated requirements is the principal factor in the quantity of corn farmers sell in a season. This suggests that if the corn crop turns out as large or larger than indicated in August, a record or near-record quantity of corn may be marketed in 1946-47.

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consideration the seasonal movement of corn from farms, but only the total quantity of corn sold by producers from a crop 1/.

The essential determining factor in the quantity of corn a farmer will sell is the quantity he has on hand in excess of his own immediate or anticipated requirements for feeding livestock. Most of the corn supply is in the form of grain, although some is in silage and in corn for hogging down, grazing, etc. Choice of a variable or variables to reflect the quantity of corn in excess of farmers' requirements may be made in a number of ways. In the present analysis, the quantity of corn grain produced from each crop was divided by the estimated number of hogs fed from the corn crop plus the number of all cattle, horses, and mules on farms on the January 1 following the corn harvest. Number of hogs fed was determined by the addition of 50 percent of the pig crop produced in the spring of the year in which the corn was harvested, all of the fall pig crop of that year, plus 50 percent of the spring pig crop of the following year. The result of this calculation was expressed in bushels of corn grain per animal. The quantity of corn sold during the season was then related to this production of corn grain per animal.

For the 20-year (1926-45) period (crop marketing years beginning October) a close relationship existed between the quantity of corn sold from the North Central Region and the production of corn grain per animal (fig.p15). About 88 percent of the variation in the quantity of corn marketed was explained by changes in the quantity of corn grain produced per animal. Carry-over stocks of old-crop corn remaining on farms were not considered, nor were price relationships considered directly. For the 1926-45 period, the standard error of estimate was about 46 million bushels, or 11.2 percent of the average quantity sold.

When carry-over of old-crop corn on farms October 1 is added to this correlation, the two factors, production per animal and carry-over, explain almost 93 percent of the variation in the quantity of corn sold by farmers in the North Central Region during the 1926-45 period. The standard error of estimate of this correlation amounted to about 36 million bushels, or 8.8 percent at the mean of sales, 2/.

These relationships might be further refined by the inclusion of other factors such as livestock prices, feed prices, production of other grains, or different indexes of livestock fed. But it is apparent from the above calculations that the supply of corn per animal is a principal factor in the quantity of corn marketed by farmers. A large part of the variation in the quantity of corn sold is explained by the supply of corn grain on farms in relation to the number of hogs, cattle, horses, and mules, even though sheep and poultry were not considered.

1/ For discussions of the seasonal movement of corn see The Feed Situation, November, 1944 (pp 13-16), and April-May-June, 1946 (pp-15-17).

2/ Relating the same factors in separate analyses for the East North Central Region and for the West North Central Region gave similar results, although the coefficients for each were not quite as high as for the region when considered as a whole, and the standard errors of estimate as percentage of average sales were slightly higher.

Table 8.- Corn sold by farmers, United States, North Central Region, East North Central States, and West North Central States, crop years 1926-45

Crop	United States	North Central Region	East North Central States	West North Central States	Percentage of U.S. total: North Central Region	Percentage of U.S. total: East North Central States	Percentage of U.S. total: West North Central States
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	Percent	Percent	Percent
1926	461,982	377,621	210,775	166,846	81.7	45.6	36.1
1927	521,444	421,286	130,198	291,088	80.8	25.0	55.8
1928	498,328	426,757	171,968	254,789	85.6	34.5	51.1
1929	440,527	370,173	149,451	220,722	84.0	33.9	50.1
1930	336,768	282,684	116,539	166,145	83.9	34.6	49.3
1931	457,519	365,544	210,516	155,028	79.9	46.0	33.9
1932	566,555	486,074	236,367	249,707	85.8	41.7	44.1
1933	444,615	380,026	134,201	245,825	85.5	30.2	55.3
1934	153,046	105,100	74,219	30,881	68.7	48.5	20.2
1935	395,409	311,204	184,865	126,339	78.7	46.8	31.9
1936	216,456	152,799	115,348	37,451	70.6	53.3	17.3
1937	566,100	479,639	267,904	211,735	84.7	47.3	37.4
1938	575,233	490,642	231,378	259,264	85.3	40.2	45.1
1939	581,662	514,777	256,065	258,712	88.5	44.0	44.5
1940	487,175	390,265	172,162	218,103	80.1	35.3	44.8
1941	543,674	449,283	219,106	230,177	82.6	40.3	42.3
1942	581,104	502,792	222,314	280,478	86.5	38.2	48.3
1943	558,084	486,716	219,042	267,674	87.2	39.2	48.0
1944	730,029	648,969	211,659	437,310	88.9	29.0	59.9
1945 1/ ..	617,875	525,645	230,561	295,084	85.1	37.3	47.8

1/ Preliminary.

Table 9.-- North Central Region: Relation of farm sales of corn to production of corn grain per animal, 1926-45

Year beginning October	Quantity of corn sold X_1	Production of corn grain per animal 1/ X_2	Basic data					
			Corn grain production	Horses and mules on farms January 1 following	All cattle on farms January 1 following	Spring pig crop	Fall pig crop	Farm stocks of old-crop corn Oct. 1
	1,000 bu.	Bushels	1,000 bu.	1,000 head	1,000 head	1,000 head	1,000 head	1,000 bu.
1926	377,621	15.63	1,481,847	9,838	26,722	40,640	16,491	223,072
1927	421,286	16.36	1,560,629	9,475	26,216	42,816	17,435	133,242
1928	426,757	17.76	1,690,480	9,160	27,160	41,719	17,637	55,465
1929	370,173	16.17	1,546,787	8,881	28,443	40,708	17,768	111,877
1930	282,684	13.49	1,321,291	8,605	29,546	40,426	17,480	101,674
1931	365,544	15.22	1,542,131	8,271	30,765	44,231	20,306	137,030
1932	486,074	18.92	1,949,833	8,030	32,574	39,707	21,616	180,529
1933	380,026	15.11	1,508,053	7,833	34,039	41,937	21,755	295,565
1934	105,100	8.50	640,484	7,655	30,568	30,408	10,062	244,048
1935	311,204	16.94	1,362,907	7,404	31,038	23,667	15,011	34,773
1936	152,799	8.90	709,349	7,142	29,287	30,375	14,439	120,176
1937	479,639	21.28	1,687,209	6,803	29,062	27,327	14,198	31,715
1938	490,642	18.42	1,621,064	6,491	29,653	31,149	16,966	299,899
1939	514,777	18.13	1,748,384	6,288	31,302	38,655	20,846	509,557
1940	390,265	15.98	1,547,530	6,097	33,289	37,337	19,939	506,931
1941	449,283	16.62	1,771,358	5,837	35,082	37,695	23,829	417,791
1942	502,792	17.88	2,177,304	5,617	37,110	45,933	28,494	375,394
1943	486,716	17.16	2,093,092	5,279	38,453	55,190	30,130	313,607
1944	648,969	21.77	2,273,057	4,925	38,236	41,029	20,601	164,710
1945 2/	525,645	19.34	2,038,494	4,475	36,473	40,304	23,936	248,219
1946 2/						40,714		
Mean	408,400	16.48						

1/ Production of corn grain divided by total of cattle, horses, and mules on farms January 1 following, plus 1/2 spring pig crop, all of the fall pig crop, and 1/2 of the spring pig crop of the following year.

2/ Preliminary.

Coefficients calculated for the years 1926-45:

$r_{12} = .936$

$S_{1.2} = 45.74$ million bushels

Regression equation:- $X_1' = -179.8605 + 35.69757 X_2$

Table 10.- Prices received by farmers for corn and oats and market prices of high-protein feeds, by months, 1935-46
Index numbers (1935-39 = 100)
(Data for cover page)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Corn						
Average 1935-39	97	98	98	104	106	105	111	110	110	92	83	84
1940	77	79	81	85	92	92	91	91	90	86	82	79
1941	81	81	83	90	95	99	101	101	102	94	92	97
1942	105	111	113	115	118	119	120	121	120	112	110	116
1943	127	131	137	145	150	153	156	158	158	155	152	161
1944	164	164	165	166	166	166	169	169	168	164	153	153
1945	155	153	155	155	156	161	162	164	162	164	161	158
1946	159	161	165	168	195	205	284					
						Oats						
Average 1935-39	111	112	112	111	109	100	94	85	89	89	90	95
1940	107	111	114	114	108	96	83	79	79	83	93	95
1941	98	97	99	104	100	98	96	96	117	114	121	133
1942	148	153	153	152	152	137	129	125	127	127	130	139
1943	154	163	172	180	180	191	193	192	205	219	221	226
1944	228	231	233	234	235	232	225	208	189	194	195	204
1945	212	216	218	209	203	198	194	173	171	185	200	207
1946	211	215	221	224	234	238	249					
						Oilseed meals						
Average 1935-39	105	102	100	103	104	99	102	97	96	94	98	101
1940	110	105	105	105	103	90	86	88	87	89	102	101
1941	99	91	90	92	92	97	110	113	138	127	128	135
1942	142	142	138	131	126	124	129	129	130	129	130	131
1943	131	134	136	136	135	134	134	166	166	166	166	166
1944	166	166	166	166	166	166	166	166	166	166	166	166
1945	166	166	166	166	166	166	166	166	166	166	166	166
1946	166	166	166	166	201	212	322					
						Animal proteins						
Average 1935-39	105	103	101	98	96	95	96	96	101	101	101	105
1940	119	111	105	107	110	101	101	94	98	92	99	98
1941	105	110	112	128	132	135	145	141	151	150	142	152
1942	165	170	168	162	162	161	163	164	165	165	165	165
1943	165	165	165	165	165	165	165	166	166	166	166	166
1944	166	166	166	166	166	166	166	166	166	166	164	164
1945	166	166	166	166	166	166	166	166	166	166	166	166
1946	166	166	166	166	182	187	226					